

Two other papers, by Ray Macauley and Tristan Weddigen, in contrast, concern spacecraft sent from Earth to other planets, and, indeed, beyond. Macauley analyses, in a comparative foray into American astroculture, how the famous plaque attached to the *Pioneer* probes was negotiated. Designed by Frank Drake, Carl Sagan and Linda Salzman Sagan, the plaque pictured two naked human beings against the background of a map of pulsars. The scientists argued that science, as universal knowledge, would be a language understood by any alien sophisticated enough to find the probes. Macauley, however, teases out the plaque's earthbound cultural specificities. Weddigen's short paper is a drily comic reading of the art and music carried by the *Beagle 2* mission to Mars. Given that the lander was lost, perhaps smeared over the planet's surface, it is a moot point whether a Martian would consider their lost chance to hear Blur or see Damien Hirst's spot paintings to be a blessing or a curse. 'Historically, aliens have been the mirror image of humanity's fears and hopes by surpassing us in intelligence or wickedness', notes Weddigen; 'In 2003, Martians were imagined as late consumers of mainstream Britpop' (p. 306).

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GABRIELLE HECHT (ed.), *Entangled Geographies: Empire and Technopolitics in the Global Cold War*. Cambridge, MA and London: MIT Press, 2011. Pp. ix + 337. ISBN 978-0-262-51578-8. £20.95 (paperback).
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Gabrielle Hecht's *Entangled Geographies* brings together a collection of essays exploring the Cold War and empire building through the under-studied lens of technopolitics, which she defines as 'the hybrid forms of power embedded in technological artifacts, systems and practices' or a 'range of ways in which technologies become peculiar forms of politics' (p. 3). The volume, which resulted from workshops at the University of Michigan (2005) and Technische Universiteit Eindhoven (2007), explores the strategic dimensions surrounding the quest for a technology-driven modernity for which states have striven during much of the Cold War. The tensions that ran through the Cold War were replicated in the struggles over technology in both the West and the East. Nonaligned countries like India, which had a well-developed scientific and technological base at its independence, were not outside this purview either. The quest for a universal Baconian modernity seemed to offer the panacea for all pressing predicaments – from everyday human suffering to national economic underdevelopment.

The book places itself at the interdisciplinary crossroads of science and technology studies (STS), diplomatic history, and anthropology and history of development, and provides the much-awaited intellectual bridges amongst these. Hecht's own piece on South African nuclear geographies provides a succinct analysis of the internal and international politics surrounding uranium mining in apartheid South Africa – a subject she explores in greater details in her book *Being Nuclear: Africans and the Global Uranium Trade* (2012). Itty Abraham studies the discourse of sovereignty in the Indian state of Travancore surrounding the strategic significance of radioactive thorium, with the end of British rule in the subcontinent. Alongside Hecht's and Abraham's contributions, Sonja D. Schmid's essay on Soviet practices of technology transfer in the nuclear domain to Czechoslovakia and East Germany demonstrates well the significance of nuclear technopolitics during the Cold War on both sides of the Iron Curtain. In a post-Hiroshima world, the 'nuclearity' of things, to borrow Hecht's own expression, was inevitable.

The close liaison between science and the state apparatus transformed the prevailing economic theories of development into rational instruments of large-scale problem solving in the laboratory of society. Martha Lampland explores how state planning was not the sole preserve of socialist governments, but has been adopted by capitalist states like the United States, Japan, Sweden and Nazi Germany at different times in history. Her essay on technopolitical planning in Hungary

explores this issue in light of Budapest's endeavours to attain economic development on one hand and preserve its strategic autonomy amidst European power struggles on the other, both prior to and during the socialist period.

The wave of decolonization in the wake of the Second World War made technology transfers an essential component of 'correcting' North–South imbalances. The discourse of sovereignty for these newly independent states tended to be firmly entrenched in a science-based understanding of 'catching up', with politics over technology an essential component of their national identities. The Charter of Economic Rights adopted by the United Nations General Assembly in December 1974, seven months after the call for a 'new international economic order' (NIEO), enlisted 'transfer of technology' under Article 13 as one of the ways to eliminate the widening gap between the developed and developing countries. Another dimension related to technology transfers was the circulation of technical experts between the centre and the periphery and the resultant knowledge sharing. The co-authored essay by Donna Mehos and Suzanne Moon analyses the emergence of technical aid programmes of the United Nations, in the domain of agriculture, which brought together members of academia, private businesses and government bodies, and prioritized the importance of 'portable knowledge' over and above 'place-based knowledge'.

The book underlines that while decolonization formally ended the 'age of empires', empire building persisted in more innovative ways. For Ruth Oldenziel, this was through the US establishment of military bases on strategically significant islands across the world, thereby establishing a 'networked empire', unlike the large territorial empires that the European powers had maintained. Essays in the volume focus on a wide array of subjects – from the architectural modernization of Brasilia by Juscelino Kubitschek's government, to establish the interior city as the new Brazilian capital between 1956 and 1961, to poor Saudi technocratic state policies towards Shi'ite date farmers in al-Hasa, leading to local rebellion in 1979 amidst renewed global tensions of the New Cold War.

This volume adheres to the intellectual tradition of Michael Adas, Timothy Mitchell, Nick Cullather and others, who have demonstrated that science and scientific rationality are not ends in themselves, but instead are means to attain value-laden goals. In the same genre is Hecht's earlier work on the French nuclear programme, *The Radiance of France* (1998), where she explores the political underpinnings of the technological choices made by the French state in the nuclear domain. While the field of Cold War history is fast expanding with the increasing availability of primary sources from various national, international and private archives, the Cold War today is itself being studied from a plethora of different dimensions. This anthology of essays, with its fresh perspective and strong interdisciplinarity, bears testimony to this scholarly enterprise, which is oriented towards opening up new research vistas, problematizing long-held notions and overall 'deprovincializing' the Cold War (p. 3).

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